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United States Patent

[19]

Mischenko

[11] Patent Number: **5,117,073**[45] Date of Patent: **May 26, 1992**[54] **CONTROL SIGNAL INITIATOR
RESPONSIVE TO A HINGE POSITION**

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[58] Field of Search 200/5 R, 5 A, 11 R, 200/11 K, 61.62, 61.7; 379/433, 1

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[57] ABSTRACT

A hinge actuated switch apparatus initiates a control signal responsive to the rotational movement of a flip element (103) on a radiotelephone unit (100). The radiotelephone unit's circuitry senses of whether the flip element (103) is in a closed or open position. The integrated miniature switch comprises a pin (223) attached eccentrically to one end of a hinge (221) on the flip element (103). As the flip element (103) is rotated, the pin (223) drives a push rod (203) to compress a conductive elastomeric pad (205) thereby electrically connecting normally open conductive circuit pads (234 and 236), on the surface of a printed circuit board (201).

17 Claims, 6 Drawing Sheets

